

## Abstract

A stator of an electric machine, which stator has an annular stator core (13) comprised of at least one stator core segment (14), having a welding seam (20) that joins the at least one stator core segment (14). In the stator, the welding seam depth ( $T_S$ ) of the welding seam is a function of a yoke height ( $H_{yoke}$ ) and a tolerance value ( $\Delta T_S$ ) and is described by the function

$$T_S = 0.5\text{mm} * (H_{yoke}/\text{mm} - 1) \pm \Delta T_S.$$

10 (Fig. 2)